

REMARKS

Applicants respectfully request reconsideration of the present application in view of the foregoing amendments and in view of the reasons that follow.

I. Status of the Claims

Claims 2 and 7 are amended with “about” removed. Claims 20 and 21 are added; support for claims 20 and 21 can be found, for example, on page 14, lines 24-27 in the Specification. Non-elected claims 10-19 are cancelled, and the Applicants reserve the right to pursue the subject matter of the cancelled claims in subsequent divisional applications. No new matter has been introduced, and claims 1-9, and 20-21 are currently pending to be examined on their merits.

II. 35 U.S.C. § 112 Rejections

Claims 2-9 are rejected under 35 U.S.C § 112, second paragraph, as being indefinite. In view of the amendments to claims 2 and 7, the indefiniteness rejections should now be overcome.

III. 35 U.S.C. § 102 Rejections

Claims 1-3 and 7-9 are rejected under 35 U.S.C § 102(b), as being anticipated by WO 0243704 (WO ‘704), or equivalently US 2004/0076675 (‘675). The Applicants respectfully traverse.

WO ‘704 discloses improving the solubility and the oral absorbability of the slightly water-soluble component by subjecting it to wet granulation, together with a surfactant and a hydrophilic polymer in the presence of water. However, nowhere does WO ‘704 teach a product with **improved granulatability** or granulatability-improving action of a surfactant, as claimed in the present application.

The Office alleges that improved solubility and oral absorbability of a slightly water-soluble component are one embodiment of improved granulatability. *See* Office Action, page 3. The Applicants respectfully traverse. As stated on page 5, lines 13-26 in the Specification, the “improved granulatability” referred to in the present application is very different from

improved “solubility” or “oral absorbability.” In fact, it is generally known in the art that improvement in granulatability does not guarantee improvement in oral absorbability, and it may be that improvement in granulatability is not necessarily required for the improvement in oral absorbability. Furthermore, depending on the procedure, oral absorbability may be improved, while granulatability remains poor. Therefore, improved solubility and oral absorbability do not translate into improved granulatability, as alleged by the Office. Thus, WO ‘704 does not teach every element of the products as claimed in the present application.

Therefore, WO ‘704 does not anticipate the product in claim 2 by inherency, as alleged by the Office; *see* Office Action, page 4.

The Office also alleges that it would be reasonable that at least about 35% by weight of the granulated product of WO ‘704 would not pass through a 100-mesh sieve. *See* Office Action, page 4. The Applicants respectfully disagree. It is a general practice in the pharmaceutical industry to remove coarse particles by sifting the particles through a sieve with a large pore size (such as 420 μm) during the production of a granulated product, but this is merely to remove irregularly coarse particles, if any. Accordingly, mere use of a 420 μm sieve does not necessarily result in many particles not passing a 100-mesh sieve, as alleged by the Office, particularly, for instance, when there are no irregularly coarse particles to begin with.

Because WO ‘704 does not teach every element recited in the present claims and does not anticipate the latter by inherency, the Applicants respectfully request that the anticipation rejections be withdrawn.

IV. 35 U.S.C. § 103 Rejections

Claims 4-6 are rejected under 35 U.S.C § 103(a), as being obvious over WO 0243704 (WO '704), or equivalently US 2004/0076675 ('675). The Office alleges that the optimization of the weight ratio of a slightly water-soluble component to surfactant is obvious to one of ordinary skill in the art. The Applicants respectfully traverse.

(A) Current Obviousness Standard

The Supreme Court recently reaffirmed the Graham factors for determining obviousness in *KSR Int'l Co. v. Teleflex Inc.* (No. 04-1350) (U.S., April 30, 2007). The Graham factors, as outlined by the Supreme Court in *Graham et al. v. John Deere Co. of Kansas City et al.*, 383 U.S. 1 (1966), are: 1) determining the scope and contents of the prior art; 2) ascertaining the differences between the claimed invention and the prior art; 3) resolving the level of ordinary skill in the pertinent art; and 4) evaluating evidence of secondary consideration. The Supreme Court recognized that a showing of "teaching, suggestion, or motivation" to combine the prior art to meet the claimed subject matter could provide a helpful insight in determining whether the claimed subject matter is obvious under 35 U.S.C. § 103(a), and held that the proper inquiry for determining obviousness is whether the improvement is more than the predictable use of prior art elements according to their established functions. The Court noted that it is "important to identify a reason that would have prompted a person of ordinary skill in the relevant field to combine the [prior art] elements" in the manner claimed, and specifically stated:

Often, it will be necessary . . . to look to interrelated teachings of multiple patents; the effects of demands known to the design community or present in the marketplace; and the background knowledge possessed by a person having ordinary skill in the art, all in order to determine whether there was ***an apparent reason to combine the known elements in the fashion claimed*** by the patent at issue. To facilitate review, this analysis should be made explicit.

KSR Int'l Co. v. Teleflex Inc., slip op. at 14 (emphasis added). As discussed below, the cited art cannot render the claimed invention obvious.

(B) WO 0243704 (WO '704)

As described above, WO '704 aims to improve the solubility or oral absorbability of the slightly water-soluble component, and does not teach or suggest improvement of the granulatability. Therefore, one of ordinary skill in the art would not have been motivated to optimize the weight ratio of the compound of WO '704 for the purpose of improving the granulatability, as claimed in the present application. *See KSR Int'l Co.*

Additionally, due to the addition of an excipient, the slightly water-soluble component of WO '704 is less than 30% at maximum (*see e.g.*, Example 14, WO '704), and nowhere does WO '704 disclose a granulated product comprising **30% or more** by weight of the slightly water-soluble compound, as recited in claims 20 and 21. By contrast, as shown in Examples in the present Specification, the superior granulatability of the claimed products is afforded by the addition of a small amount of surfactant (1%) and in a weight ratio to a compound with poor wettability of 1:0.02. As a result, the content of the compound with poor wettability may be increased to as high as 50%. Therefore, the improved granulatability in the present application can be achieved without addition of an excipient, as that in WO '704, and, as a result, an increase in the product size. In fact, even if one of ordinary skill in the art attempts to optimize the weight ratio of a pharmaceutical compound and a surfactant WO '704 to further improve the solubility, one would not be able to reach the claimed products of the present application since solubility does not equate with granulatability.

Therefore, for the reasons above, the Applicants respectfully request reconsideration of the obviousness rejections.

CONCLUSION


The Applicants believe that the present application is now in condition for allowance. Favorable reconsideration of the application as amended is respectfully requested.

The Examiner is invited to contact the undersigned by telephone if it is felt that a telephone interview would advance the prosecution of the present application.

The Commissioner is hereby authorized to charge any additional fees which may be required regarding this application under 37 C.F.R. §§ 1.16-1.17, or credit any overpayment, to Deposit Account No. 19-0741. Should no proper payment be enclosed herewith, as by a check or credit card payment form being in the wrong amount, unsigned, post-dated, otherwise improper or informal or even entirely missing, the Commissioner is authorized to charge the unpaid amount to Deposit Account No. 19-0741. If any extensions of time are needed for timely acceptance of papers submitted herewith, the Applicants hereby petition for such extension under 37 C.F.R. § 1.136 and authorizes payment of any such extensions fees to Deposit Account No. 19-0741.

Respectfully submitted,

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By 

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